

REMARKS

This reply is in response to the Office action (Paper No. 12) of the 6 August 2003.

Claims 1-9, 15, 16, 21-39 and 41-51 are pending in this application.

I. Restriction Requirement

The examiner stated that newly submitted claims 41-49 are withdrawn from consideration as being directed to a non-elected invention that is independent or distinct from the invention originally claimed because the composition of claims 1-9, 15, 16, 21, 24, 31, 33, 34, 50 and 51 can be made by a process other than by the process of claims 41-49.

The examiner's argument is not correct for the following reason.

First, the examiner did not meet the initial requirement for the restriction requirement.

Examiners must provide reasons and/or examples to support conclusions. MPEP § 803. For purposes of the initial requirement, a serious burden on the examiner may be *prima facie* shown if the examiner shows by appropriate explanation of separate classification, or separate status in the art, or a different field of search as defined in MPEP § 808.02. That *prima facie* showing may be rebutted by appropriate showings or evidence by the applicant. MPEP § 803.02.

Here, the examiner did not show by appropriate explanation of separate classification, or separate status in the art, or a different field of search as defined in MPEP § 808.02. The examiner's restriction requirement was merely based on that "the composition of claims 1-9, 15, 16, 21, 24, 31, 33, 34, 50 and 51 can be made by a process other than by the process of claims 41-49." It looks like that the examiner wanted to apply MPEP § 806.05(f). According to MPEP § 806.05(f), a process of

making and a product made by the process can be shown to be distinct inventions if either or both of the following can be shown: (A) that the process *as claimed* is not an obvious process of making the product and the process *as claimed* can be used to make other and different products; or (B) that the product *as claimed* can be made by another and materially different process. However, the examiner did not provide any “another and materially different process.” Without explaining “another and materially different process,” the examiner’s restriction requirement is not complete in accordance with the requirements of 37 C.F.R. §1.104(b) and (c), and must be withdrawn.

Second, even if the examiner can provide reasons, examples and/or “another and materially different process” to support conclusions in the next Office action, the examiner’s requirement is not proper because the examination of all of the pending claims would not be a serious burden on the examiner.

The *prima facie* showing may be rebutted by appropriate showings or evidence by the applicant. MPEP § 803.02. The above MPEP § 806.05(f) also states that, if applicant convincingly traverses the requirement, the burden shifts to the examiner to document a viable alternative process or product, or withdraw the requirement.

Here, claims 41 to 51 include the same features as are present in claims 1 to 40, and claims 41 to 51 and the mandatory field of search for claims 1 to 40 are therefore classified in the same classification. Also, the search of the claims 41 to 51 is inherently a subset of the search of the claims 1-9, 15, 16, 21-39, since the claims 41 to 51 are limited to methods involving the compositions as recited in the claims 1-9, 15, 16, 21-38, or 39. The compositional limitations of the method claims 41 to 51 are found in the compositional limitations of the claims 1-9, 15, 16, 21-38, or 39.

Therefore, no search of additional classes should be necessary. Accordingly, the examiner's argument of "constructive election" is not proper, and all of these claims must be examined. Such action is respectfully requested.

Third, the applicant notes that claims 41 through 51 use either the same, or comparable definitions of Applicant's invention. Under U.S. practice,

"[w]here the claims of an application define the same essential characteristics of a *single* disclosed embodiment of an invention, restriction therebetween should never be required. This is because the claims are but different definitions of the same disclosed subject matter, varying in breath or scope of definition." *Manual of Patent Examining Procedure*, 8th Edition, Revision 1.

In essence, the *Manual* prohibits restriction under the guise of "election by original presentation," or under any other theory. Accordingly, the Examiner's refusal to consider claims 41 through 51 is improper; all of the pending claims must be examined. Reconsideration and such action is respectfully requested.

Therefore, the examination of all of the claims is respectfully requested.

II. Rejection - 35 U.S.C. 103(a)

Claims 1-3, 5-8, 15, 16, 21-39, 50 and 51 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Morrison et al. (U.S. Patent Nos. 5,879,649 and 6,066,329) and Camp et al. (U.S. Patent No. 5,964,905).

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981 (CCPA 1974). “All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970).

1. Completeness of the Action.

The examiner did not fully answer the Applicant’s responses filed on 25 April 2003 and 11 July 2003.

According to MPEP §707.07(f), “[w]here the requirements are traversed, or suspension thereof requested, the examiner should make proper reference thereto in his or her action on the amendment. Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant’s argument and answer the substance of it. If a rejection of record is to be applied to a new or amended claim, specific identification of that ground of rejection, as by citation of the paragraph in the former Office letter in which the rejection was originally stated, should be given.” (Emphasis added.)

In the Reply of 11 July 2003, the applicant traversed the examiner’s 103 rejection. The traverse was based on, but not limited to, the following reasons: (1) neither the viscosity nor the flash point limitations is taught or suggested in the prior art; (2) neither the viscosity nor the flash point limitations are recognized as result effective variables in the prior art; and (3) the results of optimizing ranges of the hydrocarbon oil and the copolymer were unexpectedly good.

In the Office action (Paper No. 12), while the examiner only answered to the examiner’s

argument regarding the flash point. The examiner did not answer to the examiner's arguments based on the viscosity and the ranges of the hydrocarbon oil.

Therefore, the examiner's Action is not complete. If the examiner repeats the rejection, please take note of the applicant's arguments in this Reply and answer the substance of it to make the Action complete.

2. Claims 1, 6, 15, 21, 31, 41 and 50

Here, the examiner fails to establish a *prima facie* case of obviousness for the following reasons.

In *In re Wertheim*, the court held that in the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a *prima facie* case of obviousness exists. The court set out "exceptions to this rule in cases where the results of optimizing a variable, **which was known to be result effective**, were unexpectedly good." (*In re Antonie*, 195 USPQ 6, 8 (CCPA 1977), *In re Waymouth*, 182 USPQ 290 (CCPA 1974)). Thus, it should be noted that, in *In re Antonie*, the court held that **a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation.** (559 F.2d 618, 195 USPQ 6 (CCPA 1977)). (In *In re Antonie*, the claimed wastewater treatment device had a tank volume to contractor area of 0.12 gal./sq. ft. The prior art did not recognize that treatment capacity is a function of the tank volume to contractor ratio, and therefore the parameter optimized was not recognized in the art to be a result-effective variable. See also MPEP 2144.05 II. B.) It

should be also noted that the court has consistently refused to recognize “obvious to try” rejections. (“[O]bvious to try is not the standard of 35 U.S.C. §103.”, *In re Tomlinson*, 53 CCPA 1421, 363 F.2d 928, 150 USPQ 623 (CCPA 1966)).

(1) The examiner did not show that the claimed range of the viscosity of the hydrocarbon oil overlaps or lies inside ranges disclosed by the prior art.

The independent claims 1, 6, 15, 21, 31, 41 and 50 define the *viscosity* of the hydrocarbon oil.

In accordance with the decision of *In re Antonie*, the first issue is whether the claimed range of the viscosity of the hydrocarbon oil overlaps or lies inside ranges disclosed by the prior art.

Here, the examiner is silent on the viscosity feature claimed in the present invention. The examiner merely showed the flash point through Camp ‘905, but did not show the viscosity feature. The Examiner’s proposed combination of Morrison ‘649, 329, and Camp ‘905 universally require that the candle be constructed in a container; the Examiner’s proposed combination is unyielding and repeatedly consistent upon the “gel body within said container” as defined, by way of example, in the secondary reference, at column 2, lines 40 and 53. In contradistinction, Applicant’s claims 1, 6, 15, 21, 31, 41 and 50 define candles and processes with a specific viscosity feature that is neither taught nor suggested by the Examiner’s proposed combination. Moreover, process claim 41 and candle claim 50 further define Applicant’s “elastic mass that remains free standing.” This feature is neither taught nor suggested by the Examiner’s proposed combination, which requires “a container.” In view of these and other deficiencies, and the advantageous results noted in the

foregoing paragraphs flowing from these deficiencies in the proposed combination, allowance of claims 1, 6, 15, 21, 31, 41 and 50 are required.

Accordingly, the examiner fails to establish a *prima facie* case of obviousness.

(2) Neither the viscosity nor the flash point was first recognized as a result-effective variable, which achieves a recognized result.

Even if the examiner can show that the claimed range of the viscosity and the flash point of the hydrocarbon oil overlap or lie inside ranges disclosed by the prior art, the ranges must be recognized as result-effective variables to achieve the present invention under the rule of *In re Antonie*. (As stated above, the court held that a particular parameter must first be recognized as a result-effective variable, *i.e.*, a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). See also MPEP 2144.05 II. B.)

The examiner's attention is invited to consider the applicant's specification, where the applicant wrote that: "Two of these values [(*i.e.*, viscosity and flash point)] for the hydrocarbon oil of TABLE 1 are very important when choosing the hydrocarbon oil" at page 13, lines 2-5, and that "[w]hen the values for the hydrocarbon oil and copolymer specified for the composition of the compound of the present invention are maintained, a very special relation between the viscosity and the flash point is achieved" at page 11, lines 19-21. The description and the claims of the present application describe the viscosity range of the hydrocarbon oil for the free standing compound and

the flash point for allowing the correct combustion of the free standing compound or candle.

The Morrison patents recognize neither the viscosity of the hydrocarbon oil nor the flash point of the hydrocarbon oil as a result effective variable to the “free standing” compound. Even if Camp ‘905 discloses the flash point, Camp ‘905 does not recognize the flash point as a result effective variable to the “free standing” compound because Camp ‘905 does not disclose the “free standing” compound. More importantly, Camp ‘905 is silent on the viscosity feature of the hydrocarbon oil. Therefore, at least one of the flash point and the viscosity of the hydrocarbon oil was not recognized as a result-effective variable to achieve the “free standing” compound in the cited references.

Therefore, in accordance with the decision of In re Antonie, the examiner fails to establish a prima facie case of obviousness.

(3) The present invention is patentable because of the ranges of the hydrocarbon oil and the copolymer.

The independent claims 1, 6, 15, 21, 31, 41 and 50 define the concentration ranges of the hydrocarbon oil and the copolymer.

As stated above, in *In re Wertheim*, the court held that in the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a prima facie case of obviousness exists. The court set out “exceptions to this rule in cases where the results of optimizing a variable, which was known to be result effective, were unexpectedly good.” (*In re Antonie*, 195 USPQ 6, 8 (CCPA 1977), *In re Waymouth*, 182 USPQ 290 (CCPA 1974)).

Here, the specification of the present application states that “[t]he reasons for the composition of the present invention providing superior and unexpected type results, are related to the chemical characteristics of the hydrocarbon oil, such as a white oil,” “when the values of the hydrocarbon oil and copolymer are below the specified values for the composition of the present invention, the compound could be free standing at room temperature but the heat of the wick's combustion can melt the compound to a liquid point,” and “[o]n the other hand, when more polymer than what is specified in the present invention is used to harden the compound or composition, the compound or composition can inflame with the combustion produced by the candle's wick.” (page 11, line 17 to page 12, line 5) (Emphasis added). That is, even if these claimed concentration ranges of the hydrocarbon and the copolymer lie inside ranges disclosed by Morrison et al. ‘694 or Morrison et al. ‘329, the results of optimizing the concentration ranges of the hydrocarbon oil and the copolymer are unexpectedly good for the above reason. The examiner further stated that “Camp further supports the teachings of Morrison that the gel consistency is controlled by varying the amount ratio and types of tri block copolymers. The higher the amount of copolymer, the stiffer the gel, column 3, lines 19-21.” This disclosure is related only to the gel consistency, not to the free standing property. The applicant explicitly states in the specification that “when more polymer than what is specified in the present invention is used to harden the compound or composition, the compound or composition can inflame with the combustion produced by the candle's wick.” (page 11, line 17 to page 12, line 5) That is, the Morrison patents or the Camp patent recognizes the polymer concentration as a result effective variable to harden the compound (i.e., to achieve the gel consistency or the stiffer gel), not to achieve the compound *having the ability to stand by itself even during use of a candle made with*

the compound.

Also, even if the polymer concentration was known to be result effective, the results of optimizing a variable were unexpectedly good compared with the Morrison patents because some of the polymer ranges in the Morrison patent is more than what is specified in the present invention, and thus the Morrison candle may inflame with the combustion produced by the candle's wick. This optimization is neither recognized nor expected in the Morrison patents.

Conclusively, since the ranges of the hydrocarbon oil and the copolymer were not recognized as result effective variables to achieve “free standing” property defined by the present application and/or the results of optimizing variables are unexpectedly good, the independent claims 1, 6, 15, 21, 31, 41 and 50 are patentable.

(4) The “free standing” property is not inherent in the cited references.

The examiner stated that the composition of the prior art has the same or overlapping ratio of hydrocarbon oil and block copolymers therefore *inherently* having the same properties rendering the instant claims obvious.

The examiner’s argument is not correct for the following reasons.

The examiner’s attention is invited to consider MPEP §2112.

MPEP §2112 states that

“The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because

inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). “To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’ ” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted)”; and

“In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original) (Applicant’s invention was directed to a biaxially oriented, flexible dilation catheter balloon (a tube which expands upon inflation) used, for example, in clearing the blood vessels of heart patients). The examiner applied a U.S. patent to Schjeldahl which disclosed injection molding a tubular preform and then injecting air into the preform to expand it against a mold (blow molding). The reference did not directly state that the end product balloon was biaxially oriented. It did disclose that the balloon was “formed from a thin flexible inelastic, high tensile strength, biaxially oriented synthetic plastic material.” *Id.* at 1462 (emphasis in original). The examiner argued that Schjeldahl’s balloon was inherently biaxially oriented. The Board reversed on the basis that the examiner did not provide objective evidence or cogent technical reasoning to support the conclusion of inherency.).”

Here, there is no evidence of that the candles of Morrison et al. ‘694, ‘329 and Camp ‘509 taken separately or in combination can be free standing.

In the specification, the applicant defines the phrase “free standing” as the compound “having the ability to stand by itself at room temperature, such that even during use of a candle made with the compound, such that the heat of the candlewick’s combustion does not melt nor deform the body of the candle made with the compound of the present invention.” (Page 2, lines 8 to 12; emphasis added.) While Morrison et al. ‘694, ‘329, or Camp ‘509 taken separately or in combination discloses “hard” and “stiff” candles, these candles are not necessarily able to “free-stand.” That is, there are candles which are stiff and hard at room temperature but the heat of the wick’s combustion deform

the body of the candle. Accordingly, the terms “stiff” and “hard” candles are not necessarily the “free standing” candles defined in the present application. The fact that all of the examples and the specification in Morrison et al. ‘694 and ‘329 and Camp ‘509 are directed only to jar candles or gel candles within a container supports this conclusion.

Also, as stated above, the examiner did not show that the viscosity feature was found in the cited references. Where the examiner did not show that same composition is used in the cited references taken separately or in combination, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly “free standing” characteristic necessarily flows from the teachings of the applied prior art to rely upon the theory of inherency. (“In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)).

The examiner’s attention is also invited to consider the decision of *In re Rijckaert*. In *In re Rijckaert*, the court **reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art** (emphasis added); *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993)

If the examiner’s rejection is based on inherency, the examiner must prove that inherency was based on what was necessarily present in the prior art rather, not on what would result due to optimization of conditions.

2. Claims 2, 3, 5, 7, 8, 16, 22-30, 32-39, 42-49 and 51

Reconsideration of the rejection of claims 2, 3, 5, 7, 8, 16, 22-30, 32-39, 42-49 and 51 is also respectfully requested because the applicant has presented above reasons why independent claims 1, 6, 15, 21, 31, 41 or 50 are patentable and claims 2, 3, 5, 7, 8, 16, 22-30, 32-39, 42-49 and 51 depend effectively from the independent claims 1, 6, 15, 21, 31, 41 or 50.

III. Objection - Claims 4 and 9

Claims 4 and 9 were objected to as being dependent upon claims that are not allowable.

Reconsideration of the objection of claims 4 and 9 is also respectfully requested because the applicant has presented above reasons why claims 1 and 6 are patentable and claims 4 and 9 depend effectively from claims 1 and 6.

III. Objection and Rejection - Claims 2 and 7

The claim 2 was objected to because 67.8 cSt should be corrected to 32 cSt at 40 °C as set forth on page 12 in Table 1 as set forth in claim 1. The claims 2 and 7 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The examiner further stated that the correction required in claims 2 and 7 makes the claims 2 and 7 not to provide a further limitation of claims 1 and 16 and the claims should be canceled.

The examiner's argument is not correct. The specification reads as follows: "In a preferred

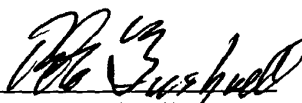
embodiment of the compound of the present invention, the hydrocarbon oil has a viscosity of 340 SUS@ at 37°C (100°F) and when the viscosity is in CST@, the hydrocarbon oil has a viscosity greater than or equal to 67.8 CST@ at 40°C (104°F), the hydrocarbon oil has a flash point at 240°C (464°F), and the selected copolymers are three-block polymers “Kraton ® G 1652,” (page 6, lines 4-8) and “[t]wo of these values for the hydrocarbon oil of TABLE 1 are very important when choosing the hydrocarbon oil, such as the white oil (“Vaseline”), which are: the flash point desirably should not be inferior to or less than 200°C (392 °F) and the viscosity desirably should not be inferior to or less than 32 CST@, desirably at least 67.8 CST @” (page 13, lines 2-5). That is, “67.8” in Table 1 shows a preferred range as explained on page 13, lines 2-5. The claim 2 claims the preferred range as set forth on page 6, lines 4-8 and page 13, lines 2-5. Accordingly, there is no informality in claim 2 as argued by the examiner. Also, the examiner’s rejection under 35 U.S.C. 112, second paragraph is not proper because the preferred range provides a further limitation of the claims 1 and 16.

Withdrawal of the objection and the rejection is respectfully requested.

Should a Petition for extension of time be required with the filing of this Amendment, the Commissioner is kindly requested to treat this paragraph as such a request and is authorized to charge Deposit Account No. 02-4943 of Applicant’s undersigned attorney in the amount of the incurred fee if a check of the requisite amount is not enclosed.

In view of the above, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

Respectfully submitted,



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